Montana Fish, Wildlife & Parks

490 North Meridian Road
Kalispell, MT 59901

Blossom Lakes and Creek Fisheries Rehabilitation Project Decision Notice

June 29, 2009

Proposal

The proposed action is to remove brook trout from Blossom Lakes and Creek, located approximately 25 miles west of Thompson Falls, Montana, in the upper Prospect Creek watershed to protect native fish. The project area is entirely on Lolo National Forest lands and includes the upper lake (8 acres), lower lake (24 acres), and approximately 3 miles of the creek. Montana Fish, Wildlife and Parks (MFWP) plans to use a combination of electrofishing and piscicide treatment to remove brook trout. Treatment is scheduled for August 2009. Piscicide (Prenfish brand, 5% rotenone liquid formulation) will be applied with venturi siphons from small motorboats, backpack sprayers, and drip stations. Gear will be airlifted into the lakes with a small helicopter. Detoxification of the piscicide with potassium permanganate will occur just upstream of the confluence of Blossom Creek and Glidden Gulch. Prior to piscicide treatment electrofishing will be conducted in the lower half of Blossom Creek to remove any native salmonids (westslope cutthroat and bull trout) from the treatment reach. These fish will be held nearby and returned to the creek after rotenone treatment to facilitate recolonization.

The main objective of removing brook trout is to protect native salmonid stocks in the upper Prospect Creek watershed. The brook trout population in the Blossom Lakes and Creek has recently been identified as an emerging threat, as their range is expanding into areas previously inhabited only by bull and westslope cutthroat trout. Brook trout can harm bull trout (an ESA threatened species) through hybridization and competition, and westslope cutthroat trout (Montana species of special concern) through competition and predation. Removal of this threat to native salmonids is consistent with both state and local fisheries management plans. Upper Prospect Creek contains one of only two purely native fisheries remaining within the lower Clark Fork drainage.

Blossom Lakes are relatively popular backcountry fishing locations for local anglers. To retain a recreational fishing opportunity, the lakes will be stocked in spring/summer 2010 with westslope cutthroat trout in a variety of sizes from the MFWP hatchery in Anaconda, Montana. These hatchery fish are from the same stock used to plant other Sanders County lakes.

Environmental Policy Act Process

MFWP is required to assess potential impacts of the proposed project to the human and physical environment. In compliance with requirements of the Montana Environmental Policy Act (MEPA), a draft environmental assessment (EA) was completed by MFWP and released for public comment in April 2009. There are no ground disturbing actions proposed on US Forest Service (USFS) lands, so the draft did not require analysis under the National Environmental Policy Act.

Public notices were posted in two local newspapers, and a front-page article on the proposed project was written in the Sanders County Ledger. Public comments on this project were taken for 30 days, from April 7 to May 7, 2009. The EA and project were also discussed at a meeting of the Sanders County Flycasters club (May 2009), a meeting of the Sanders County Commissioners (May 2009), and at an open meeting held at the Sanders County Courthouse on April 21, 2009. Copies of the EA were available at the Thompson Falls MFWP office and on the MFWP website.

Issues raised during the public comment period on the draft EA are listed in the comment section below. There were no modifications to the draft EA based on public comment and the draft EA and decision notice serve as the final document.

Summary of issues addressed in the Environmental Assessment (EA)

- Threats to native salmonids in upper Prospect Creek watershed.
- Effects of rotenone-based piscicides on humans.
- Effects of rotenone-based piscicides on nontarget organisms.
- Potential impacts of piscicides on water quality.
- Social impacts of changing recreational fishery.

Summary of Public Comments

The EA was open for comments from April 7 – May 7, 2009. Comments were provided through telephone, e-mail, letters, comment forms, and verbally at meetings. In total, 22 written comments were received for this EA during the open period (verbal comments not quantified). Nineteen comments came from individuals, one from a Montana state representative on behalf of constituents, one from the Montana Wildlife Federation, and one from Avista Natural Resources. Of the 22 comments, 12 were in support of the project; 10 were opposed. Many of the comments were overlapping in their subject matter and were combined and summarized under "General Comment." A few very specific questions were received and were listed verbatim as well.

General Comment: Four individuals stated that removing brook trout (current daily bag limit = 20) from Blossom Lakes and replacing them with westslope cutthroat trout (daily bag limit = 3) would reduce their harvest opportunity, and that hiking into a mountain lake for only 3 fish is not worth the effort.

Reply: MFWP acknowledges that anglers will be able to harvest fewer fish from the Blossom Lakes when restocked with cutthroat trout. However, there are many other locations in Sanders, Mineral, and Lincoln Counties where individuals can harvest brook trout, so this would not constitute the loss of a unique or rare angling opportunity. Additionally, MFWP believes that cutthroat trout will attain larger sizes than the brook trout currently do in Blossom Lakes and will provide more consumable flesh per individual fish. Finally, removal of nonnative brook trout to protect native salmonids is consistent with local, state, and federal management plans for the Lower Clark Fork region.

General Comment: Two individuals commented that by removing brook trout from the Blossom Lakes we would take away a good opportunity for youth fishing and recruitment of young anglers to the group of Montana sportsmen and women.

Reply: By restocking the lakes with westslope cutthroat trout the year following rotenone treatment, fishing opportunity for young (and older) anglers will be retained. Young anglers will be able to catch native fish in a near-pristine setting and will still be able to harvest fish for meals in camp. MFWP also believes that cutthroat trout will attain larger sizes than brook trout currently do in the lakes. Cutthroat and brook trout are considered about equal in catchability.

General Comment: One individual expressed their dislike for the use of chemicals for treatment and strongly suggested that we use alternate methods to remove the brook trout.

Reply: The alternate methods to meet our goals would be mechanical and electrofishing removal, which were identified in Alternative 3 under Part II of the EA. Mechanical and electrofishing methods have not been successful in similar situations, greatly reducing the potential for success. Chemical treatment has proven successful and is widely used, the chemical to be used is approved by EPA, and application would be by certified applicators under permit.

General Comment: Other nonnative fish, specifically brown trout, have more potential to harm bull trout populations in the Lower Clark Fork region than brook trout in Blossom Lakes and Creek do.

Reply: MFWP agrees that brown trout can have detrimental effects on bull trout populations, where they overlap. Many tributaries in the LCF region have both bull and brown trout, and some competitive interactions harming bull trout have been documented (specifically redd superimposition). On the other hand, brook trout both compete with and have the potential to hybridize with bull trout, effectively eliminating them as a native population. Hybridization has been documented in several lower Clark Fork tributaries.

However, brown trout are not present in the Blossom Lakes and Creek, nor are they in the upper Prospect Creek watershed. Therefore, the threats of brown trout are not relevant to this project.

General Comment: One individual questioned the effects of the rotenone formulation (Prenfish in this case) on wildlife and humans.

Reply: The effects of rotenone-based piscicides have been studied extensively and were well documented in the draft EA. Comments specific to Prenfish, including the non-rotenone ingredients, were also given in the draft EA, particularly under Section 8 of the document. The chemical used is approved for use by EPA by licensed applicators.

General Comment: Two individuals requested specific examples of similar projects where rotenone was used to successfully remove fish from a lake setting.

Reply: References to several projects are made in the draft EA. In the past 60 years, 140+ chemical treatment projects have been conducted in MFWP Region 1 to control or remove fish. Some of the more recent lake efforts include Kilbrennan Lake, Black Lake, Loon Lake, Big Hawk Lake, and Martin Lakes.

General Comment: Three individuals and two groups expressed their approval for the native species conservation component of this project.

Reply: MFWP appreciates these comments.

General Comment: Two individuals made the comment that brook trout have been in this lake for a long time, maybe over 100 years, and have caused no harm to date. Why is there interest in removing the brook trout all of a sudden?

Reply: There was interest in removing this brook trout population in the 1980s, which was documented in the EA, so interest is not new. Also, MFWP's reasoning for proposing this project was also documented in the EA, and includes the recently observed increase in brook trout catch in lower Blossom Creek through electrofishing surveys, which greatly increases the potential to harm native fisheries.

General Comment: It was suggested that the limit on brook trout harvest be removed from the lakes prior to rotenone treatment.

Reply: MFWP believes that the current limit of 20 brook trout per person per day is high enough that removing this restriction would have little functional benefit.

General Comment: It was suggested that an observation group made up of a few concerned citizens be formed to view the treatment in action. This suggestion arose from concern that MFWP might be misrepresenting the actions that would occur during treatment.

Reply: MFWP will look at this potential, but there are real issues with safety and training that may prevent this from occurring.

Specific Comment: During rotenone treatment, how will the movement of brook trout out of Blossom Creek and into Glidden Gulch and Prospect Creek be prevented? It

seems likely that fish will attempt to move downstream away from the toxicant slug and that this will require some means of arresting downstream movement of brook trout.

Reply: To stop downstream movement of fish out of the treatment zone, temporary block nets will be set up just above the detoxification point. A technician or biologist will be monitoring the detoxification station and will also make sure the block net remains upright through the treatment period.

Specific Comment: We are concerned that returning the entire number of cutthroats rescued to a nominally detoxified stream may pose a chance for loss of the entire group. Are there sufficient numbers of pure westslopes in Glidden and Prospect Creeks to provide a source for repopulation of Blossom Creek if the rescued fish were lost?

Reply: MFWP is concerned about returning the "rescued" fish to the creek so quickly as well, although all of our information indicates that toxicity should be insignificant in the lower portion of Blossom Creek within a few hours after we stop supplementary drip stations on the creek. Treated water from the lake, which will remain toxic for a few weeks, will travel 2 - 2.5 miles through very turbulent water before reaching the area that fish will be returned to. Rotenone breaks down quickly in turbulent waters, and water from the lake should be naturally neutralized by the time it reaches the lower creek. To confirm this we will have a few sentinel fish in cages in the creek. The "rescued" fish will not be returned to the creek until a complete group of sentinel fish survives for 24 hours.

Our reason for returning the fish so quickly is to reduce the stress associated with holding them in tanks. We believe stress will be very high on these fish; they will eat little to nothing during holding, will be crowded in the tanks, and will undergo transport via backpacks and truck in both directions. We expect some loss of fish during transport and holding (the extent of that is unknown), but the faster we can return them to their native habitat, the better. If something does go wrong and we lose the majority of these fish, there is a strong population of bull and westslope cutthroat trout in connected waters of Evans Gulch, Glidden Gulch, and Prospect Creek that can provide recolonization stocks.

Specific Comment: Restocking the lake with the hatchery strain of westslope seems less desirable than reintroducing an existing strain of locally adapted westslopes. It would appear to be more conservative of variation in the genetics of small populations to use the local cutthroat population as a source of fish to repopulate the lakes and the stream.

Reply: MFWP considered transporting local, wild fish to the lakes after treatment. It would retain the local genetic variation as well as increase the likelihood of jumpstarting a breeding population. However, there is enough concern by local anglers that a fishery remains in the lakes that a large number of fish need to be brought in quickly. Our experience is that these stocked fish will establish a breeding population within a short time, but if they do not we may look into transporting wild fish into the lakes.

The present westslope cutthroat broodstock is managed under the guidance of the University of Montana Wild Trout and Salmon Genetics Lab and has broad genetic heterogeneity with regular wild stock inputs to maintain diversity.

Specific Comment: Why not just remove the brook trout from Lower Blossom Lake and Creek and leave the brook trout in Upper Blossom Lake to keep that fishing opportunity?

Reply: MFWP tried a similar strategy in another lake system several years ago. The fish from the upper lake recolonized the lower lake within two years and effectively negated the treatment within 5 years. Due to the cost and logistics of treatment, the need to protect native fisheries, and the need to maintain more stable fishing opportunity, treatment of the entire system is the only feasible alternative.

Decision

Through the MEPA process, MFWP found no significant impacts on the human or physical environments associated with this project that could not be mitigated. Therefore, the EA is the appropriate level of analysis, and an environmental impact statement is not required.

Based on the EA, public comment, and the risk that brook trout pose to the native fish populations in upper Prospect Creek watershed, it is my decision to proceed with the restoration project to remove brook trout from Blossom Lakes and Creek and to restock with multiple-size classes of westslope cutthroat trout as soon as possible after treatment is completed. This alternative provides the best opportunity to provide for long-term conservation of native fishes in this watershed, while still providing a recreational fishery in the lakes.

James R. Satterfield, Jr.

_____ Date: June 29, 2009

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Regional Supervisor